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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,560	12/05/2003	Philip J. Ellerbrock	038190/270520	4332
826	7590	11/09/2005	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			DANG, KHANH	
			ART UNIT	PAPER NUMBER
			2111	

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Interview Summary	Application No.	Applicant(s)	
	10/729,560	ELLERBROCK ET AL.	
	Examiner	Art Unit	
	Khanh Dang	2111	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Khanh Dang. (3) ____.
- (2) Mr. Ransom (Atty of Record). (4) ____.

Date of Interview: 03 November 2005.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: ____.

Claim(s) discussed: 1.

Identification of prior art discussed: Karolys and Hanna.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Khanh Dang
Khanh Dang
Primary Examiner

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Ransom argues, in view of the proposed amendment to claim 1, that claim 1 is not directed to a clock recovery system. Instead, claim 1 is directed to the use of multiple bit rates and automatic switching from one bit rate to another bit rate depending on the bit rate used by a message presented to a receiver. Mr. Ransom also agrees with the Examiner to change the word "possible" (in "possible bit rates") to -- predetermined -- to further define the claim. The Examiner agrees with Mr. Ransom that the proposed amendments to claim 1 should overcome the current rejections. Mr. Ransom will file an RCE so that the proposed amendments can be entered.

On a side note, the Examiner would like to thank Mr. Ransom for his effort and cooperation to advance prosecution of this application by discussing in length, on behalf of the Applicants, the issues related to the rejections with the Examiner during the 11/03/05 Interview, and proposing amendments to the claim. .

Applicant Initiated Interview Request Form

In re: Ellerbrock et al
Appl. Nos.: 10/727,414, 10/729,560, 10/728,349 Group Art Unit: 3654
Filed: December 4, 2003 Examiner: K. Dang
For: NETWORK DEVICE INTERFACE FOR DIGITALLYINTERFACING
DATA CHANNELS TO A CONTROLLER VIA A NETWORK

Status of Application: Final Rejection

Tentative Participants:

(1) Examiner Dang (2) Kevin Ransom

Proposed Date and Time of Interview: November 3, 2005; 2:00 pm

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description:

Issues To Be Discussed

Rejections of application nos. 10/727,414, 10/729,560, 10/728,349

Brief Description of Arguments to be Presented:

Please see attached documents

An interview was conducted on the above-identified application on _____.

NOTE:

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR1.133(b)) as soon as possible.

(Applicant's Representative Signature)

CLT01/4762177v1

(Examiner/SPE Signature)

Appl. No.: 10/729,560 Confirmation No.: 4332
Applicant(s): Ellerbrock et al.
Filed: December 5, 2003
Art Unit: 2111
Examiner: K. Dang
Title: NETWORK DEVICE INTERFACE FOR DIGITALLY NTERFACING
DATA CHANNELS TO A CONTROLLER VIA NETWORK
Docket No.: 038190/270520

Proposed Amendment:

1. (proposed amendment) A communication system adapted to interconnect a bus controller with an associated data channel via a common digital bus, the communication system comprising:

a bus controller connected to the common digital bus for communicating in an asynchronous mode with a data channel across the common digital bus; and

a network device interface connected between the common digital bus and an associated data channel, wherein said network device interface transmits commands to and receives data from the associated data channel based on commands from said bus controller,

wherein said bus controller transmits messages containing a plurality of bits having a value defined by a transition between first and second states of the bits,

wherein said network device interface evaluates the messages transmitted by said bus controller in order to determine a timing of the data sequence of the message and uses the determined timing to communicate with said bus controller,

wherein said bus controller communicates with the network device interface using a first predetermined bit rate,

wherein said bus controller transmits a first message to the network device interface at a predetermined second bit rate, wherein the predetermined second bit rate is selected from a plurality of possible bit rates that may be used to communicate on the common digital bus,

wherein said network device interface:
receives the first message and analyzes the first message at each of the plurality of possible bit rates;

determines from the plurality of possible bit rates that the first message is being transmitted at the second predetermined bit rate at which the first message was transmitted, where the determination is made independent of a synchronous clock signal from the bus controller; and

transmitting a second message from the at least one data channel to the bus controller in response to the first message at the second predetermined bit rate.

Remarks:

Applicant respectfully submits that the Office Action is overlooking a major difference between the claimed invention and the prior art. The Office Action mistakes the claimed invention for a clock recovery system. The present invention is not a clock recovery system. Instead, the claimed invention is directed to an automatic clock rate detection system for a finite number of desirable clock rates. What is considered novel is that claimed invention is a mechanism that automatically switches to another predetermined bus rate when messaging using another bus rate is presented to the receiver.

It should be noted that neither Karolys nor Hanna discloses an automatic detection of multiple bit rates of significant difference (most likely 1000s of percent). Hanna's patent presents a Manchester decoding technique that does not require a PLL nor an asynchronous oversampling receiver to recover a standard 20 bit-time message of a known bit rate within a certain acceptance tolerance (mentioned to be about 10%). Karolys teaches about a bus that connects sensors to a host using a serially multiplexed digital communication bus. Nowhere does Hanna discuss multiple bit rates nor does Karolys cover the idea of bus speeds or bus rate selection, much less a system that is capable of communicating at different bit rates and a mechanism for determining which of the bit rates has been selected for communication.

CLT01/4762175v1